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10/066,033	01/31/2002	Andrei Ponomarenko	529	3959

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EXAMINER

SHINGLES, KRISTIE D

ART UNIT PAPER NUMBER

2141

DATE MAILED: 07/13/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/066,033

Applicant(s)

PONOMARENKO, ANDREI

Examiner

Kristie Shingles

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10-30 is/are pending in the application.
- 4a) Of the above claim(s) 1-9 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Amendment

*Applicant has amended claims 10-20.
Claims 1-9 have been cancelled. Claims 21-30 are new.
Claims 10-30 are pending.*

Specification

1. The proposed specification corrections filed 4/7/2005 have been accepted by the Examiner. The corrections to the specification will not be held in abeyance.

Claim Objections/ Rejections - 35 USC § 112, first paragraph

2. Per claim 10, the proposed correction on filed 4/7/2005 has been accepted by the Examiner. The rejection is therefore withdrawn. Correction of the claim language will not be held in abeyance.

Double Patenting

3. Regarding Claims 1-20, the obviousness type double patenting rejection of claims 1-20, provisionally rejected under the judicially created doctrine of obviousness type double patenting as being unpatentable over claims 1-9, 11-16 and 18-22 of co-pending U.S. Application No. 10/062,594, has been withdrawn.

Response to Arguments

4. Applicant's arguments with respect to claims 10, 16 and 23 have been considered but are moot in view of the new ground(s) of rejection.

Claim Objections

5. Claim 11 is objected to because of the following informalities: typographic error (repeated term) in claim language, "The system of claim 10 wherein wherein..." Appropriate correction is required.

Claim Rejections - 35 USC § 103

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 10-12 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over *Axberg et al* (USPN 6,009,466) in view of *Davis et al* (USPN 6,260,062).

a. Per claim 10, *Axberg et al* teach a system of managing a configuration database within a network management program for a SONET ring network, the system comprising:

- a plurality of managed objects representing logical representations of network entities that can be configured and modified through transactions executed by the network management program, wherein one or more of the managed objects include an object reference and a storage location pointer to another of the

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managed objects, the another of the managed objects being accessed by a combination of the object reference and the storage location pointer associated with the one or more of the managed objects (col.2 lines 1-67, col.4 lines 28-67, col.7 line 15-col.9 line 61, col.10 lines 10-15, col.11 line 12-col.12 line 44 and col.13 lines 7-16);

- an agent process that receives transaction commands from a command handler (col.6 line 61-col.7 line 14, col.11 lines 2-44, col.12 lines 6-14, col.14 lines 8-42 and col.16 lines 18-40);
- a database manager that receives the transaction commands from the agent process (col.6 line 61-col.7 line 14, col.11 lines 4-44, col.12 lines 34-44 and col.16 lines 18-40);
- a database file that stores commands from the database manager (col.7 lines 5-35, col.15 lines 46-58 and col.16 lines 25-29); and
- a transaction log file that stores actions included within transactions issued by the database manager (col.15 lines 49-58 and col.16 lines 25-29).

Axberg et al teach the system's implementation with other communication networks (col.4 lines 28-41 and col.16 lines 11-39), yet fail to explicitly teach implementation on a SONET ring network. However, *Davis et al* disclose utilizing a SONET network for element management (col.4 lines 40-52).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Axberg et al* and *Davis et al* for the purpose of extending the functional capability of the system for use on a SONET; because it would provide additional compatibility features with optical communication, for yielding higher bandwidth and increased speeds.

b. **Per claim 11**, *Axberg et al* teach the system of claim 10 wherein logical dependencies among each of the managed objects are maintained through the linking of the storage location pointers in the managed objects (col.2 lines 15-28 and 47-67, col.8 lines 29-40 and col.9 lines 36-61).

c. **Per claim 21**, *Axberg et al* teach the method of claim 10, wherein the one or more of the managed objects is accessed through direct links through the another of the managed objects (col.8 lines 18-56, col.9 lines 5-61 and col.11 line 59-col.12 line 44).

d. **Per claim 12**, *Axberg et al* teach the system of claim 11 wherein actions that modify the managed objects are stored in the database file and the transaction log file (col.15 lines 46-58).

8. Claims **13-20 and 22-30** are rejected under 35 U.S.C. 103(a) as being unpatentable over *Axberg et al* (USPN 6,009,466) and *Davis et al* (USPN 6,260,062), in view of *Traversat et al* (USPN 6,115,715).

a. **Per claim 13**, *Axberg et al* and *Davis et al* teach a system of claim 12 as applied above, yet fail to explicitly teach the system wherein, in the event of an abort condition, a most recent configuration state of the network is restored by re-applying the transactions stored in the transaction log file, and resolving the pointer links contained in affected ones of the managed objects. However, *Traversat et al* disclose fail conditions such as when a transaction is aborted and performs updating to revert back to saved-state configuration (col.9 line 42-col.10 line 60).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of *Axberg et al*, *Davis et al* and *Traversat et al* for the purpose of providing a method for failure resolution in the event of an abort condition; because it would provide maintenance and security for the integrity and stability of the configuration and transaction data in case of system failures or errors.

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b. **Claim 16** contains limitations that are substantially similar to claims 10, 12 and 13 and is therefore rejected under the same basis.

c. **Per claim 14**, *Traversat et al* teach the system of claim 12 further comprising a free space list maintained by the database manager, the free space list containing record number and size information for the managed objects that have been deleted and are available for use (col.7 lines 20-57 and col.8 lines 3-59).

d. **Per claim 15**, *Traversat et al* teach the system of claim 14 wherein a present state of the managed objects is stored in a memory buffer upon modification by one or more of the actions comprising one of the transactions (col.8 line 42-col.9 line 41 and col.10 lines 1-47).

e. **Per claim 17**, *Axberg et al*, *Davis et al* and *Traversat et al* teach the apparatus of claim 16 as applied above, *Axberg et al* further teach the apparatus further comprising a memory map storing the object reference information and the pointer information for each of the managed objects (col.2 line 49-col.3 line 22, col.8 lines 8-40, col.9 lines 8-61 and col.10 lines 10-61).

f. **Per claim 18**, *Axberg et al*, *Davis et al* and *Traversat et al* teach the apparatus of claim 17 as applied above, *Davis et al* further teach wherein the computer network comprises a parallel ring network including a first working network and a second standby network coupling each network element in the network (col.9 lines 37-54).

g. **Claim 23** contains limitations that are substantially similar to claims 10, 16 and 18 and is therefore rejected under the same basis.

h. **Per claim 19**, *Axberg et al*, *Davis et al* and *Traversat et al* teach the apparatus of claim 18 as applied above, *Traversat et al* further teach the apparatus of claim 18 wherein the

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agent process comprises one of an alarm manager process, an automatic protection process, and a configuration manager program (col.7 line 19-col.8 line 59 and col.9 line 7-col.10 line 60).

i. **Claim 20** is substantially similar to claims 10 and 21 and is therefore rejected under the same basis.

j. **Claims 22 and 30** are substantially similar to claim 21 and are therefore rejected under the same basis.

k. **Claim 24** is substantially similar to claim 11 and is therefore rejected under the same basis.

l. **Claim 25** is substantially similar to claim 12 and is therefore rejected under the same basis.

m. **Claim 26** is substantially similar to claim 13 and is therefore rejected under the same basis.

n. **Claim 27** is substantially similar to claim 14 and is therefore rejected under the same basis.

o. **Claim 28** is substantially similar to claim 15 and is therefore rejected under the same basis.

p. **Claim 29** is substantially similar to claims 13 and 19 and is therefore rejected under the same basis.

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: *Novaes et al* (USPN 6,847,993), *Nixon et al* (USPN 6,687,698), *Yamaguchi et al* (USPN 6,115,738) and *Cannon et al* (USPN 6,167,408).

10. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kristie Shingles whose telephone number is 571-272-3888. The examiner can normally be reached on Monday-Friday 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia can be reached on 571-272-3880. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Kristie Shingles
Examiner
Art Unit 2141

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